# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/630,971 | 08/01/2000 | Adrian Charles Paskins | 450110-02747 | 7478 |

20999 7590 08/09/2005

FROMMER LAWRENCE & HAUG
745 FIFTH AVENUE- 10TH FL.
NEW YORK, NY 10151

| EXAMINER | |
|---|---|
| SHELEHEDA, JAMES R | |
| **ART UNIT** | **PAPER NUMBER** |
| 2617 | |

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/630,971 | PASKINS, ADRIAN CHARLES | |
| | Examiner | Art Unit | |
| | James Sheleheda | 2617 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *27 May 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 05/27/05 have been fully considered but they are not persuasive.

a. On page 9, of applicant's response, applicant states that the art used in the rejection does not describe "the memory to, independently of and simultaneously with continued receipt of the broadcast digital television data."

In response, Zigmond specifically discloses wherein ads are multiplexed into a television signal and stored in a receiver's memory. The receiver will then retrieve the ads from memory and display the ads when a trigger is detected. The output of an ad from memory would not in any way affect the *receipt* of the broadcast digital television data, as the broadcast television signal would be continuously transmitted and received at the tuner regardless of what the receiver's local memory is outputting, and thus would clearly meet the claim limitation.

Further, it is noted that the amendment to claim 17, in fact, does *not* involve the memory whatsoever and simply requires that the broadcast data service is transmitted simultaneously with continued receipt of the television broadcast data. As Arazi discloses continuously inserting auxiliary data packets into a television signal and transmitting the signal, this limitation is clearly met.

b. The OFFICIAL NOTICE presented in the prior action stating that it is notoriously well known in the art to compress digital signals for transmission and storage and then decompress them for use was not traversed and is accordingly taken as an admission of the fact noted.

c. The OFFICIAL NOTICE presented in the prior action stating that it is notoriously well known in the art to utilize the MPEG2 standard to packetize data for transmission and storage was not traversed and is accordingly taken as an admission of the fact noted.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 17 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Arazi et al. (Arazi) (5,966,120) (of record).

As to claim 17, Arazi discloses a method of broadcasting a broadcast data service (auxiliary data; column 6, lines 13-19) together with broadcast digital television data (real time video programming; column 6, lines 13-19) as part of a broadcast signal

(column 6, lines 13-19), the broadcast data service including audio/video data (column 8, lines 12-15) independent of (wherein the auxiliary data represent targeted ads for a user; column 8, lines 10-15 and lines 56-63) and simultaneously with continued receipt of the broadcast digital television data (wherein the auxiliary data is continually inserted into and received with the television signal; column 6, lines 13-44), the method comprising broadcasting the television audio/video of the broadcast data service (auxiliary data; column 6, lines 35-40) as non-real time data (column 6, lines 35-40), and compressing a block of the audio/video data as a whole (wherein MPEG compression of video is performed by taking a block of data and encoding/compressing it into frames; column 2, lines 65-67, column 3, lines 1-5 and column 5, lines 58-65).

As to claim 19, Arazi discloses wherein the block comprises data requiring off-line decoding (wherein the received advertisements must be decoded from local storage before use; Fig. 4; column 9, lines 35-46).

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 2, 4, 6, 9-11, 13 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond et al. (Zigmond) (6,698,020) (of record) in view of Picco et

al. (Picco) (6,029,045) (of record).As to claim 1, while Zigmond discloses a system (Fig. 5) for providing to an end user (providing advertisements; column 10, lines 16-25), according to selection by the user (user selection of an preferred ad; column 16, lines 65-67 and column 17, lines 1-5), portions of a broadcast data service (advertisements; column 10, lines 16-25) transmitted together with broadcast digital television data as part of a broadcast signal (transmitted with digital satellite feeds; column 18, lines 7-21), the broadcast data service including data portions having digital audio/video data (column 6, lines 15-29) the system comprising:

a processor (inherently present to control the computer system; column 7, lines 37-49) for extracting all portions of the broadcast data service available from the broadcast signal (column 17, lines 10-20 and column 18, lines 7-21);

a memory (advertisement repository, 86; Fig. 5; column 15, lines 24-34) for storing all of the current portions of the broadcast data service (wherein with no filtering **all** downloaded ads are stored; column 17, lines 10-20);

a controller (video switch, 90) responsive to a selection signal provided by an end user (user selection of an ad of interest; column 17, lines 1-5) to cause the memory to output (inserting the selected ad from the storage; column 15, lines 57-65), independently (wherein the ad selected is determined by the user; column 17, lines 1-5) and simultaneously with continued receipt of the broadcast digital television data (wherein the broadcast television signals continues to be broadcast and *received* by the system; column 18, lines 7-21) selected portions of the broadcast data service (the ad of greatest interest to the user; column 17, lines 1-9);

he fails to specifically disclose digital audio/video data in non-real time and wherein the processor is for converting the digital television data of the broadcast data service data into real time data.

In an analogous art, Picco discloses video distribution system (Fig. 3; column 5, lines 66-67 and column 6, lines 1-16) which will transmit local content with a digital television signal (Fig. 5; column 8, lines 56-67) wherein the local content is not transmitted in real-time (Fig. 6; column 8, lines 29-36 and column 9, lines 41-51) and wherein the processor will convert the local content into real time content for display (formatting the content for display; column 11, lines 49-54 and column 12, lines 24-30) for the typical benefit of providing a more efficient use of bandwidth by utilizing spare channel bandwidth to download additional content (column 9, lines 10-25).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond's system to include digital audio/video data in non-real time and wherein the processor is for converting the digital television data of the broadcast data into real time data, as taught by Picco, for the typical benefit of providing a more efficient use of bandwidth by utilizing spare channel bandwidth to download additional content.

As to claims 2 and 6, while the current combination of Zigmond and Picco disclose wherein the digital audio/video data of the portion of the broadcast data service data is received and stored off-line (wherein the advertisements are stored for later use instead of immediate display; see Zigmond at column 17, lines 10-30), they fail to

specifically disclose wherein the audio/video data is compressed and the processor decompresses the data portions using a predefined protocol.

The examiner takes official notice that it was notoriously well known in the art at the time of invention by applicant to compress digital signals for transmission and storage and then decompress them for use, which would inherently utilize some compression/decompression protocol, for the well known benefits provided by compression such as reducing both the bandwidth and storage needed to handle the data.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond and Picco's system to include wherein the audio/video data is compressed and the processor decompresses the data portions of the broadcast data service data to take advantage of the reduced bandwidth and storage requirements for a digital signal, as typically provided by compression.

As to claim 4, Zigmond and Picco disclose wherein the processor operates directly on the data in the memory (wherein the data in storage is directly retrieved from storage for use for use; inserting the selected ad from the storage; see Zigmond at column 15, lines 57-65).

As to claim 9, Zigmond and Picco disclose wherein the memory is a magnetic hard disk drive (see Zigmond at column 6, lines 53-58).

As to claim 10, Zigmond and Picco disclose a digital television receiver for providing the broadcast signal to the processor (wherein a digital television receiver is inherently present to receive the digital television feeds; see Zigmond at column 18, lines 14-21).

As to claim 11, Zigmond and Picco disclose wherein the system (Fig. 5) is constructed as a single integral unit (see Zigmond at Fig. 5 and column 7, lines 35-49).

As to claim 13, Zigmond and Picco disclose wherein the digital television receiver selectively provides digital television data for display (selected by the user; see Zigmond at column 17, lines 1-5) and wherein the processor extracts the portions of the broadcast data service irrespective of that display (wherein the downloading and storing of ads is unrelated to the currently displayed video or channel; see Zigmond at column 17, lines 10-20 and column 18, lines 14-21).

As to claim 25, while Zigmond and Picco disclose wherein the digital audio/video data for conversion into real time audio/video data is transmitted, they fail to specifically disclose wherein the digital audio/video data is transmitted in packets according to the MPEG2 standard.

The examiner takes official notice that it was notoriously well known in the art at the time of invention by applicant to utilize the MPEG2 standard to packetize data for transmission and storage for the typical benefits of utilizing a well established standard

means for video compression which reduces both the bandwidth and storage needed to handle the data.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond and Picco's system to include wherein the digital audio/video data is transmitted in packets according to the MPEG2 standard for the typical benefits of utilizing a well established standard means for video compression which reduces both the bandwidth and storage needed to handle the data.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond and Picco as applied to claim 2 above, and further in view of Hölzle et al. (Hölzle) (5,970,249) (of record).

As to claim 3, while Zigmond and Picco, as addressed above, disclose wherein the processor processes the portions of the broadcast data service data, they fail to specifically disclose wherein the data is processed at times of low usage.

In an analogous art, Hölzle discloses a computing system (Fig. 5) wherein program compiling is to be performed is delayed (column 4, lines 1-8) until a period of inactivity by the processor (or low usage; column 4, lines 9-23) for the benefit of more efficiently utilizing system resources (column 4, lines 19-23).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond and Picco's system to include wherein the data is processed at time of low usage, as taught by Hölzle, to provide the common benefit of ensuring that a computer system runs as efficiently as possible.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond and Picco as applied to claim 1 above, and further in view of Winston (6,434,653) (of record).

As to claim 5, while Zigmond and Picco disclose wherein the processor processes the data, they fail to specifically disclose wherein the processor operates in a batch processing method with data loaded locally from the memory in small chunks.

In an analogous art, Winston discloses a computer system (Fig. 1; 100) containing a processor (101 or 104) with an internal cache (102 or 105; column 3, lines 18-19) wherein data from a local memory (113) is loaded into the caches for processing (column 3, lines 18-23) for the benefit of providing the processor with faster access to memory (column 3, lines 21-23).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond and Picco's system to include wherein the processor operates in a batch processing method with data loaded locally from the memory in small chunks, as taught by Winston, for the benefit of providing the processor with faster access to memory by loading data into caches local to the processor.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond and Picco as applied to claim 1 above, and further in view of Russo (5,619,247) (of record).

As to claim 7, while the current combination of Zigmond and Picco disclose wherein the digital audio/video data of portions of the broadcast data service is received and stored off-line (wherein the advertisements are stored for later use instead of immediate display; see Zigmond at column 17, lines 10-30), they fail to specifically disclose wherein the audio/video data is compressed and the processor decompresses the data portions using a downloaded protocol.

The examiner takes official notice that it was notoriously well known in the art at the time of invention by applicant to compress digital signals for transmission and storage and then decompress them for use, which would inherently utilize some compression/decompression protocol, for the well known benefits provided by compression such as reducing both the bandwidth and storage needed to handle the data.

Additionally, in an analogous art, Russo discloses a video distribution system (Fig. 1; column 3, lines 40-64) wherein a proprietary compression algorithm is utilized (column 7, lines 66-67 and column 8, lines 1-6) which is programmable with downloaded signals (column 8, lines 6-10) for the typical benefits for providing additional security (column 8, lines 2-10).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond and Picco's system to include wherein the audio/video data is compressed and the processor decompresses the data portions to take advantage of the reduced bandwidth and storage requirements for a digital signal, as typically provided by compression.

Additionally, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to further modify Zigmond and Picco's system to include a downloaded protocol, as taught by Russo, for the typical benefits of providing additional security to distributed contents.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond and Picco as applied to claim 1 above, and further in view of Kostreski et al. (Kostreski) (5,729,549) (of record).

As to claim 8, while Zigmond and Picco discloses wherein the data is received and processed offline (wherein it is received and stored for later use; see Zigmond at column 17, lines 10-30), they fail to specifically disclose wherein the processor conducts decryption of the data using a key.

In an analogous art, Kostreski discloses a system for receiving a digital broadcast channel (Fig. 8; column 25, lines 15-22) containing video, audio and data packets (column 25, lines 22-26) wherein the a decryption key is used to decrypt the received packets (column 25, lines 26-35) for the benefit of only allowing access to programming to authorized users (column 25, lines 26-31).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond and Picco's system to include wherein the processor conducts decryption of the data using a key, as taught by Kostreski, for the benefit of enabling cable providers to protect their programming by preventing access by unauthorized users.

10. Claims 12, 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond and Picco as applied to claim 10 above, and further in view of Trovato (6,701,526) (of record).

As to claim 12, while Zigmond and Picco discloses a memory, they fail to specifically disclose wherein the memory is constructed in a unit separate from the digital television receiver and linked by means of a network connection.

In an analogous art, Trovato discloses a cable television receiver (Fig. 2; column 4, lines 29-35) for receiving and extracting data (column 3, lines 66-67 and column 4, lines 1-5) and transmitting the extracted data over an IEEE 1394 connection to an external device (column 10, lines 42-51) for storage (column 10, lines 49-51) for providing the typical benefit of a more flexible system utilizing a portable and modular storage device.

It would have obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond and Picco's system to include wherein the memory is constructed in a unit separate from the digital television receiver and linked by means of a network connection, as taught by Trovato, for the typical benefit of providing a cable user with a portable and modular storage device with can be easily moved and replaced.

As to claim 24, Zigmond, Picco and Trovato disclose wherein the network connection is an IEEE 1394 interface (see Trovato at column 10, lines 42-51).

As to claim 26, while Zigmond and Picco disclose wherein at least some of the data portions of the broadcast data service having digital audio/video data in non-real time and the broadcast digital television data are transmitted according to a protocol (as indicated in 25 above), they fail to specifically disclose wherein at least some of the data portions of the broadcast data service are transmitted according to an alternative protocol.

In an analogous art, Trovato discloses a cable television receiver (Fig. 2; column 4, lines 29-35) for receiving and extracting data (column 3, lines 66-67 and column 4, lines 1-5) and transmitting the extracted data in an alternative protocol (over an IEEE 1394 connection to an external device; column 10, lines 42-51) for storage (column 10, lines 49-51) for providing the typical benefit of a more flexible system utilizing a portable and modular storage device.

It would have obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond and Picco's system to include wherein at least some of the data portions of the broadcast data service are transmitted according to an alternative protocol, as taught by Trovato, for the typical benefit of providing a cable user with a means to connect to a portable and modular storage device with can be easily moved and replaced.

11. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond and Picco as applied to claim 1 above, and further in view of Inoue et al. (Inoue) (US2002/0016963A1) (of record).

As to claim 14, while Zigmond and Picco disclose extracting and storing data portions, they fail to specifically disclose wherein the controller identifies corresponding extracted and stored portions and for replacing data portions stored in the memory with respective portions extracted from the broadcast signal.

In an analogous art, Inoue discloses an information receiving apparatus (Fig. 14; 100; paragraph 195) for receiving additional information transmitted with broadcast video (paragraph 75) wherein a controller (input and output control unit, 16) identifies if newly received information is an update of previously stored information (paragraph 200, lines 1-9 and lines 18-40) and replaces the previously stored portions with the newly received update (paragraph 200, lines 27-40) for the typical benefit of ensuring a user has the most up to date information available (paragraph 203).

It would have obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond and Picco's system to include wherein the controller identifies corresponding extracted and stored portions and for replacing data portions stored in the memory with respective portions extracted from the broadcast signal, as taught by Inoue, for the common benefit of providing the most recent broadcast data available to cable television viewers.

As to claim 15, Zigmond, Picco and Inoue disclose wherein, if periodically the broadcast signal includes all of the portions of the broadcast data service (see Inoue at paragraph 202, lines 1-5), the controller can store all of the received portions in the memory (see Inoue at paragraph 202, lines 1-5).

As to claim 16, while Zigmond, Picco and Inoue, as applied above, disclose wherein the controller can obtain and store in memory all of the portions of the broadcast data service (see Inoue at paragraph 202, lines 1-5), they fail to specifically disclose wherein the controller can access an additional data channel.

Picco further discloses a television set top box (Fig. 8, 120) wherein private data and local content are downloaded (column 9, lines 31-39) and stored for use at a later time (column 9, lines 40-48) over a separate channel from the broadcast television channel (column 9, lines 31-39) for the benefit of providing content to a user on demand (column 9, lines 58-60).

It would have obvious to one of ordinary skill in the art at the time of invention by applicant to further modify Zigmond, Picco and Inoue's system to include wherein the controller can access an additional data channel, as further taught by Picco, for the common benefit of enabling a cable television provider to quickly deliver content to a user as it's needed.

12. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arazi as applied to claim 17 above, and further in view of Inoue and Arsenault et al. (Arsenault) (5,886,995) (of record).

As to claim 20, while Arazi discloses broadcasting portions of the broadcast data service, he fails to disclose, during normal broadcasting, only broadcasting portions of the broadcast data service required to replace previous respective portions which have been changed such that receivers of the broadcast signal may store all of the current portions of the broadcast data service and update the stored portions according to replacement portions received with the broadcast signal.

In an analogous art, Inoue discloses an information receiving apparatus (Fig. 14; 100; paragraph 195) for receiving additional information transmitted with broadcast video (paragraph 75) wherein a controller (input and output control unit, 16) identifies if newly received information is an update of previously stored information (paragraph 200, lines 1-9 and lines 18-40) and replaces the previously stored portions with the newly received update (paragraph 200, lines 27-40) for the typical benefit of ensuring a user has the most up to date information available (paragraph 203).

Additionally, in an analogous art, Arsenault discloses a cable television broadcast system (Fig. 1) utilizing a receiving apparatus containing a local programming map (column 7, lines 33-35) wherein only updated portions are transmitted to the receiver (column 7, lines 36-38) for the typical benefit of saving bandwidth (column 7, lines 38-42).

It would have obvious to one of ordinary skill in the art at the time of invention by applicant to modify Arazi's system to include during normal broadcasting, broadcasting portions of the broadcasting data service required to replace previous respective portions which have been changed such that receivers of the broadcast signal may store all of the current portions of the broadcast data service and update the stored portions according to replacement portions received with the broadcast signal, as taught by Inoue, for the common benefit of providing the most recent broadcast data available to cable television viewers.

Additionally, it would have obvious to one of ordinary skill in the art at the time of invention by applicant to modify Arazi and Inoue's system to include, during normal broadcasting, only broadcasting replacement data, as taught by Arsenault, for the benefit of saving bandwidth in a television system by eliminating the transmission of redundant information.

13. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arazi, Inoue and Arsenault as applied to claim 20 above, and further in view of Volk et al. (Volk) (5,673,401) (of record).

As to claim 21, while Arazi, Inoue and Arsenault disclose broadcasting all of the current portions of the broadcast data service (see Inoue at paragraph 202, lines 1-5) to enable a user to obtain all portions of the broadcast data service (see Inoue at paragraph 202, lines 1-5), they fail to specifically disclose broadcasting to enable a user to obtain the data soon after initial connection.

In an analogous art, Volk discloses a set top terminal (48) wherein default programs are requested and transmitted to the set top terminal (column 36, lines 48-59) upon initialization (column 36, lines 48-52). This ensures that the set top terminal can quickly acquire the information it needs for operation.

It would have obvious to one of ordinary skill in the art at the time of invention by applicant to modify Arazi, Inoue and Arsenault's system to include broadcasting to enable a user to obtain the data soon after initial connection, as taught by Volk, for the benefit of ensuring that a cable television receiver can quickly begin operation by acquiring any data it needs upon initialization.

14. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arazi, Inoue, Arsenault and Volk as applied to claim 21 above, and further in view of Picco.

As to claim 22, while Arazi, Inoue, Arsenault and Volk disclose wherein all of the current portions of the broadcast data service are broadcast, they fail to specifically disclose wherein the data is broadcast using a separate dedicated channel.

In an analogous art, Picco discloses a television set top box (Fig. 8, 120) wherein private data and local content are downloaded (column 9, lines 31-39) and stored for use at a later time (column 9, lines 40-48) over a separate channel from the broadcast television channel (column 9, lines 31-39) for the benefit of providing content to a user on demand (column 9, lines 58-60).

It would have obvious to one of ordinary skill in the art at the time of invention by applicant to modify Arazi and Inoue's system to include wherein the data is broadcast

using a separate dedicated channel, as taught by Picco, for the common benefit of enabling a cable television provider to quickly deliver content to a user as it's needed by not relying on the bandwidth of the television video channel.

15. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arazi, Inoue, Arsenault and Volk as applied to claim 21 above, and further in view of Payton (5,790,935) (of record).

As to claim 23, while Arazi, Inoue, Arsenault and Volk disclose wherein all of the current portions of the broadcast data service are broadcast periodically, they fail to specifically disclose wherein the data is broadcast using an expanded bandwidth at a time of low demand for the broadcast digital television data.

In an analogous art, Payton discloses a television distribution system (Fig. 2) wherein items are transmitted during off-peak hours and stored for later use (column 4, lines 24-40) for the benefit of conserving bandwidth during times of high user demand (column 4, lines 34-44).

It would have obvious to one of ordinary skill in the art at the time of invention by applicant to modify Arazi, Inoue, Arsenault and Volk's system to include wherein the data is broadcast using an expanded bandwidth at a time of low demand for the broadcast digital television data, as taught by Picco, to more efficiently utilize available bandwidth and conserve bandwidth during times of high user demand.

***Conclusion***

16. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

## Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

on _____.
(Date)

Typed or printed name of person signing this certificate:

_____

Signature: _____

Registration Number: _____

## Certificate of Transmission

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. (703)_____ - _____ on _____.
(Date)

Typed or printed name of person signing this certificate:

_____

Signature: _____

Registration Number: _____

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sheleheda whose telephone number is (571) 272-7357. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James Sheleheda
Patent Examiner
Art Unit 2617

JS

VIVEK SRIVASTAVA
PRIMARY EXAMINER